

REMARKS

Upon entry of the amendments herein, claims 1-42 remain pending in the application. Claims 10, 12, 19, 29, 32, 36, 38, 40 and 41 have been amended to correct inadvertent errors. No new matter has been introduced by any of these amendments.

The cross-reference to related applications in the specification has been amended, primarily to correct the listing of copending application Serial No. 09/511,481 as a divisional of Serial No. 09/094,402. The '481 application is actually a continuation of the '402 application; no restriction requirement was ever leveled in the latter. This correction is also being made in the cross-reference in the '481 application. Also, the listing of foreign priority documents in the instant cross-reference has been deleted.

The Examiner has noted that the application is deficient with respect to the certified copies of foreign priority documents. Applicants will take care of this in due course.

The Examiner has leveled a restriction requirement. In response thereto, Applicants hereby provisionally elect, with traverse, restriction group I, claims 1-27 and 29-37, drawn to an expandable stent. The Examiner further asserts that there are two patentably distinct species of claimed stents, the first

being shown in Figures 1-11 and the second being shown in Figures 12-15, and requires an election of one of these alleged distinct species. In response thereto, Applicants hereby provisionally elect, again with traverse, the embodiment shown in, for example, Figures 1, 2, 8 and 11, i.e., a stent with end zones (elements 10 and 20 in the figures). Currently, all of the elected claims read on this elected embodiment.

As the basis for dividing the claims into restriction groups I and II, the Examiner asserts that the stents of group I do not have to be made by the method of manufacturing recited in the claims of group II, i.e., "from a tube with material removed therefrom." The Examiner asserts that the stents of group I "can be made from metal wire." Applicants disagree with this assessment.

The Examiner is referred to, for example, instant Figure 2. If one follows the helical elements as they traverse the length of the stent and notes the relationship between the helical elements themselves and between the helical elements and the end zones, one can see that the stent according to the instant invention cannot be made from a continuous piece of wire as the Examiner asserts. Put another way, one could put the tip of a pen at one point of a stent according to the instant invention and not be able to draw over all of the portions of the stent

without lifting the pen point. On the other hand, one could certainly do this with a stent made from a piece of wire. In order to obtain the stent according to the instant invention, one would have to start out with a solid tube; in the case of the instant claims of restriction group II, the method comprises cutting portions out of a solid tube to obtain the structures and patterns shown in the instant figures. Accordingly, the Examiner's basis for dividing the product claims from the method-for-manufacturing claims is without merit and the claims should be rejoined.

With respect to the Examiner's further assertion that there are two patentably distinct groups of stents themselves, Applicants have the following comments:

The crux of the instant invention is the inventive arrangement of helical, cylindrical and circumferential elements and the way they are interconnected. The unique combinations of features embodied in the instant stent allow for, for example, superior flexibility, radial hoop strength and stent-to-vessel ratio in the deployed state. Even with the improvements embodied in the instant stents, however, there can still be a phenomenon known as the "dog bone effect." As stents are deployed, there is a tendency for the ends to expand out of proportion to the expansion in the middle portion. This can be exacerbated by the

fact that expansion of the ends forces the middle portion to be contracted. This could also result in foreshortening of the stent. While any such effect observed with the instant stents would be less than that for previously known stents, providing end zones to the stent prevents what dog bone effect might be manifested and allows full manifestation of the superior properties of the inventive stent, including uniform deployment. This is particularly important as the intended deployed diameter of the stent increases. However, as disclosed on page 8, lines 25 and 26 of the specification, end zones are not necessarily required for effective deployment of the stent. This is particularly true when the deployed diameter of the stent is small. More generally, what is desired is that the ends of the stent be square, however this is achieved. For example, when the linear segments form an angle with the cylindrical axis, there would be little or no need for end zones.

Accordingly, Applicants maintain that the two embodiments alleged by the Examiner to be patentably distinct are, in effect, under a single genus of patentable subject matter. As mentioned earlier in this response, all of the presently elected claims read on the elected embodiment, i.e., a stent with end zones. It should be noted that, while some of the claims specifically recite end zones, many do not. However, those

claims that do not recite end zones per se nonetheless encompass both stents with and without end zones; there are no presently pending claims that specifically exclude stents with end zones.

For the reasons set forth above, all of the presently pending claims and the subject matter contained therein should be considered together by the Examiner. It is respectfully requested that the restriction requirement be withdrawn and that claims 1-42, encompassing stents both with and without end zones, and methods for manufacturing them, be examined on the merits.

The Commissioner is hereby authorized to charge any fees which may be due for any reason to Deposit Account No. 23-1703.

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Respectfully submitted,



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